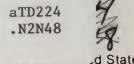
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





d States

Department of Agriculture

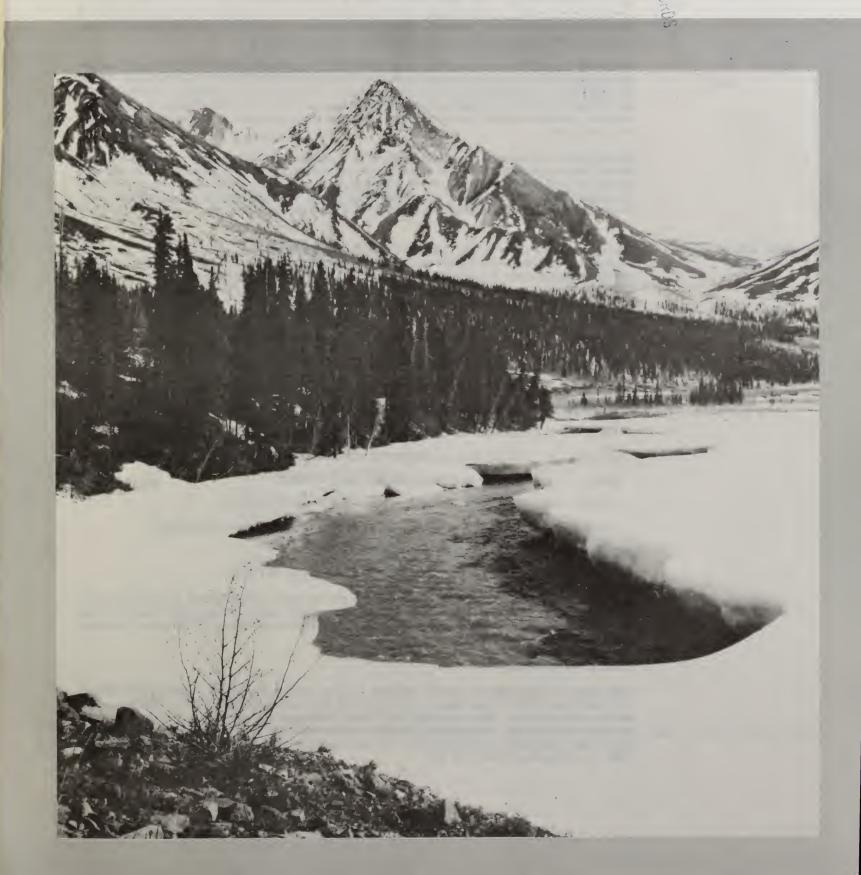
Soil Conservation Service

Reno Nevada



Nevada Water Supply Outlook

April 1, 1987



Foreward

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 97102
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97208
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 547, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Nevada Water Supply Outlook

and

Federal - State - Private Cooperative Snow Surveys

Issued By

Wilson Scaling Chief Soil Conservation Service Washington, DC 20013

Released By

Charles Adams State Conservationist Soil Conservation Service Reno, Nevada 89502

Prepared By

Chris Pacheco Water Supply Specialist Soil Conservation Service 1201 Terminal Way, Second Floor Reno, Nevada 89502

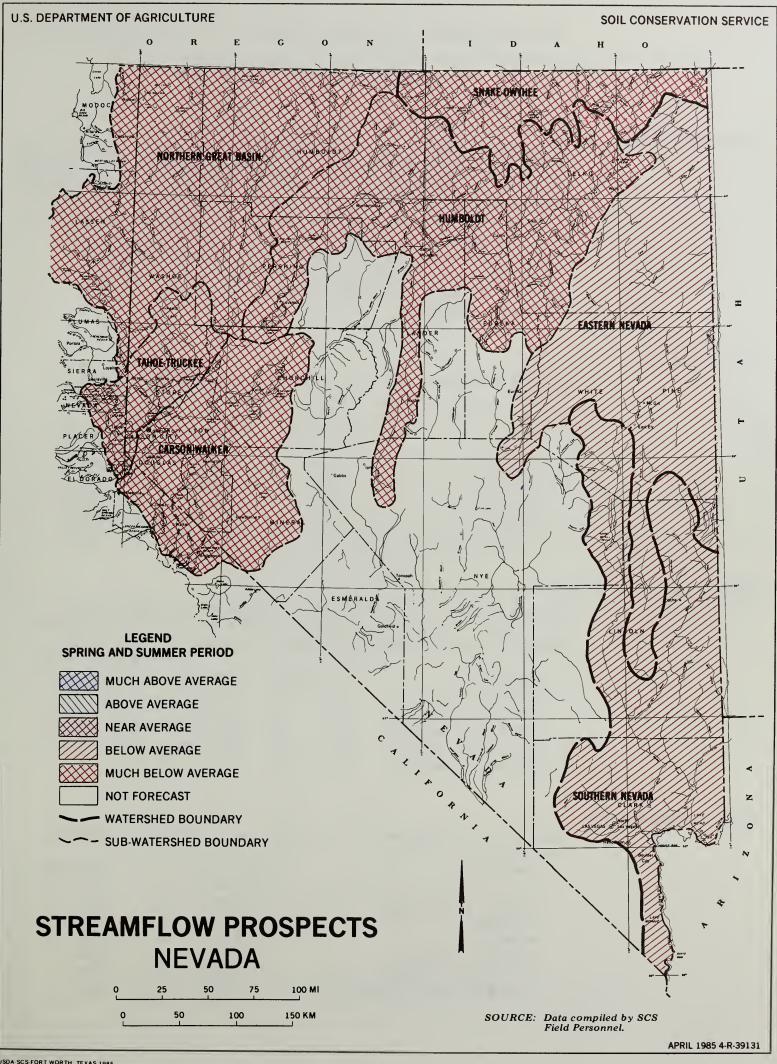
In Cooperation With

Roland D. Westergard Director Department of Conservation & Natural Resources Carson City, Nevada 89701

Programs and assistance of the United States Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.

TABLE OF CONTENTS

State Streamflow Prospects Map01
State General Outlook02
Basin Outlook and Conditions
Tahoe & Truckee Basins04
Carson & Walker Basins06
Humboldt Basin08
Snake & Owyhee Basins10
Eastern Nevada12
Northern Great Basin14
Southern Nevada16
Snow Data Measurements18
Additional Information22



SUMMARY:

SNOWPACK CONDITIONS HAVE IMPROVED SLIGHTLY DURING THE MONTH OF MARCH BUT REMAIN BELOW AVERAGE TO WELL BELOW AVERAGE. PRECIPITATION FOR THE MONTH OF MARCH RANGED FROM WELL BELOW AVERAGE TO DATE PRECIPITATION VARIED FROM WELL BELOW AVERAGE TO NEAR AVERAGE. RESERVOIR STORAGE WAS STILL ABOVE AVERAGE AT THE END OF MARCH. STREAMFLOW FORECASTS INDICATE THAT FLOWS WILL RANGE FROM WELL BELOW AVERAGE TO NEAR AVERAGE DURING THE APRIL - JULY FORECAST PERIOD.

SNOWFACK:

Snowpacks improved for most of the major basins in the state but remain below normal to well below normal. Snow water contents are as follows:

1	BASIN	% (OF AVG.	BASIN	%	OF AVG.	1
1							1
1	TAH0E		56%	HUMBOLDT		81%	1
1	TRUCKEE		56%	SNAKE		76%	1
1	CARSON		48%	OWYHEE		59%	1
1	WALKER		46%	EASTERN		74%	1
1	N. GREAT BASIN		80%	SOUTHERN		53%	1

PRECIPITATION:

Precipitation during March ranged from well below average to above average. Year to date precipitation remained well below average for most of the state. .

1 0	marned werr nerow	averag	- 10	i most of	THE STO	1.5	•
1		4/1	YTD		4/1	YTD	- 1
1	BASIN(S)	% OF A	VG.	BASIN(S)	% OF A	VG.	1
1							- 1
1	TAHOE & TRUCKEE	76 1	46	HUMBOLDT	115 I	64	1
1	CARSON & WALKER	61	47	EASTERN	126	67	1
1	N. GREAT BASIN	111	64	SOUTHERN	113	96	1
1	SNAKE & OWYHEE	82 1	57				1

RESERVOIRS:

Reservoir storage in the state was above average at the end of March.

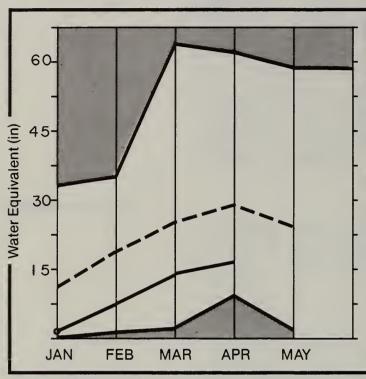
rne	e end of march.								
1	BASIN(S)	%	CAI	PACI	ΤY	%	0F	AVERAGE	1
1									1
1	TAHOE & TRUCKEE		. 6	57%			. 1	.17%	1
1	CARSON & WALKER		. :	86%			. 1	. 14%	1
1	HUMBOLDT		. 8	84%			. 1	. 3 3%	1
1	SNAKE & OWYHEE		. 6	51%			. 1	.49%	ļ
1	SOUTHERN NEVADA		. (33%			. 1	.05%	1
1	SEVEN MAJOR RESERVOIRS			73%			. 1	.16%	1

STREAMFLOW

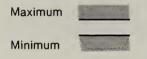
Streamflows in the	state are f	orecast at	well below	
average to slightly	above aver	age during	April-July.	
BASIN(S)	% OF AVG.	BASIN(S)	% OF AVG.	ļ
				1
I TAHOE & TRUCKEE	40%-54%	HUMBOLDT	43%-77%	1
I CARSON & WALKER	30%-48%	EASTERN	46%-107%	-
I N. GREAT BASIN	40%-72%	SOUTHERN	76%	1
I SNAKE & OWYHEE	36%-55%			-

TAHOE & TRUCKEE BASINS

Mountain snowpack* (inches)

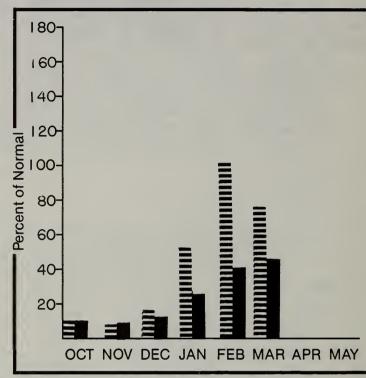


*Based on selected stations



Average ----

Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

WALER SUPPLY OUTLOOKS

Snow water contents for April are well below average. The Lake Tahoe Basin has about 56% of the average snowpack and 43% of the water content present last year. The Truckee Basin presently has 43% of last year's snowpack and is 56% of normal. March's predipitation was 76% of average and 71% of last year. Total precipitation since October 1, 1986 is 46% of average and 36% of last year's total precipitation figures at this time. Reservoir storage is 17% over the average. Total storage for Boca, Lake Tahoe, Prosser and Stampede is 697,900 acre feet. Streamflow forecasts indicate flows will be well below average during the April - July forecast period. The Truckee River at Farad is expected to flow at 40% of normal.

TAHOE & TRUCKEE BASINS

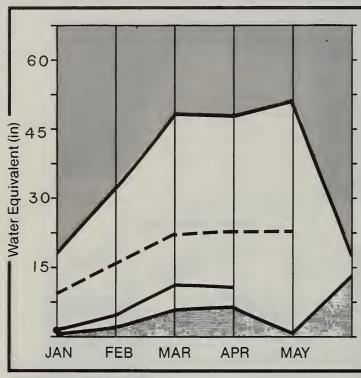
FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	PROBABLE	PROBABLE		REAS. MAX. (% AUG.)		REAS. MIN. (% AUG.)	
LAKE TAHOE RISE(assume gates closed)	APR-HTG	1.5	0.5	27	1.0	68	0.2	14	
TRUCKEE RIVER at Farad 2		284.7			189.0		41.0		
LITTLE TRUCKEE RIVER above Boca 2		91.5			68.0		16.0		
FYRAMID LAKE RISE (LOW 2/1/87)	FOM-HIG	1.2	-1.1	31	0.0	62	-2.0	5	
STEAMBOAT CREEK at Steamboat 2	AFR-JUL	7.1	3.8	54	6.0	85	2.0	28	
SAGEHEN CREEK, Ca	AFR-JUL	6.5	2.6	40	5.0	77	1.0	15	
GALENA CREEK rir Steamboat, Nv	APR-JUL	4.5	2.0	44	3.0	67	1.0	22	
RESERVOIR RESERVOIR	USEABLE (** USE/	BLE STORAG	SE XX	WATERSHED		ED SNOWPACK NO. COURS AVG'D	THIS Y	EAR AS % O
BOCA RESERVOIR	40.9	···	30.3	,	LAKE TAHOE	RISE		43	56
LAKE TAHOE	744.6	490.5	637 . 6	431.9	TRUCKEE BA	SIN	18	43	56
PROSSER RESERVOIR	28.6	10.1	9.4	8.6	LITTLE TRU	OCKEE RIVER	5	41	55
STAMPEDE RESERVOIR	226.5	180.0	204,7	133.4	SAGE HEN C	REEK	5	46	54
					GALENA CRE	EK	3	33	49
				1	STEAMBOAT	DRAINAGE	2	32	46
					FYRAMID LA	KE	33	43	56
				.]					

¹ - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage.

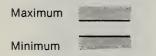
The average is computed for the 1961-85 base period.

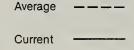
CARSON & WALKER BASINS

Mountain snowpack* (inches)

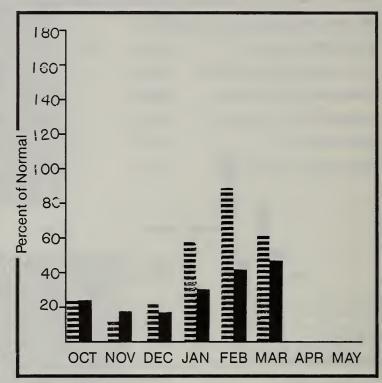


*Based on selected stations





Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation

Year to date precipitation

WAILK SUPPLY OUTLIOK!

Snowpack accumulations remain well below average for The water content in the Carson River Basin is 48% of average and 33% of last year's water the Walker River Basin has 46% of the content. average snowpack and 20% of last year's snowpack. March precipitation in the Carson-Walker Basins was 61% of normal and only 60% of last March's recorded Year to date precipitation is well precipitation. below average at 47%. This year's total precipitation is 34% of the year to date figures last Water storage at Bridgeport. vear at this time. Lahontan and lopaz reservoirs is 14% above normal. Streamflows are expected to range from 30% - 48% of The Carson River hear Carson City is forecast to flow at 3% of normal.

CARSON & WALKER BASINS

FORECAST FOINT	FORECAST PERIOD	AVG.		MOST PROBABLE (% AVG.)		REAS. MAX. (% AUG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)		
EF CARSON RIVER or Gardnerville. No	APR-JUL	198.4	95.0	- 48	151.0	76	39.0	20		
WF CARSON RIVER at Woodfords, Ca	APR-JUL	56.7	26.0	46	43.0	76	11.0	19		
CARSON RIVER near Carson City, Nv	APR-JUL	198.3	65.0	33	126.0	64	22.0	11		
CARSON RIVER near Ft. Churchill, Nv	APR-JUL	182.4	55.0	30	113.0	62	22.0	12		
EAST WALKER RIVER or Bridgeport 2	AFR-AUG	76.8	28.0	36	61.0	79	15.0	20		
WEST WALKER RIVER near Coleville, Ca	APR-JUL	154.6	64.0	41	98.0	63	30.0	19		
WALKER LAKE RISE (LOW 2/1/87)	LOW-HIG	-0.0	-1.2	29	0.0	101	-2.7	10		
RESERVOIR	STORAGE	** USEA	1000AF)	i i		WATERSH	ED SNOWFACI		-	AS % OF
RESERVOIR	CAPACITY	THIS	LAST	AUG.	WATERSHED		COURS AVG 1			AVERAGE
BRIDGEPORT RESERVOIR	42.5	42.2	32.2	34.2	E. CARSON	RIVER	5	31		46
_AHONTAN RESERVOIR	295.1	256.3	300.1	226.7	W. CARSON	RIVER	5	32		45
THUMIALHIA WESEWANTH										
	59.4	42.6	51.2	39.6	CARSON RV.	at Carson	City 4	30		43
	59.4	42.6	51.2	- 1		at Carson		30		43 43
	59.4	42.6	51.2		CARSON Rv.		urchi 4			
	59.4	42.6	51.2		CARSON RV.	at Ft. Ch	urchi 4 dgepo 6	30		43
TOPAZ RESERVOIR	59.4	42.6	51.2		CARSON RV.	at Ft. Ch Rv. or Bri Rv. or Col	urchi 4 dgepo 6	30 29		43 49

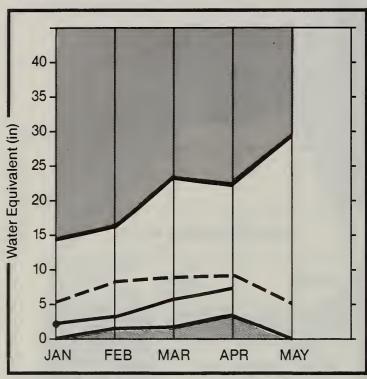
^{1 -} Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

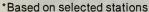
^{2 -} Corrected for upstream diversions or changes in reservoir storage.

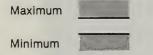
The average is computed for the 1961-85 base period.

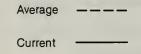
HUMBOLDT BASIN

Mountain snowpack* (inches)

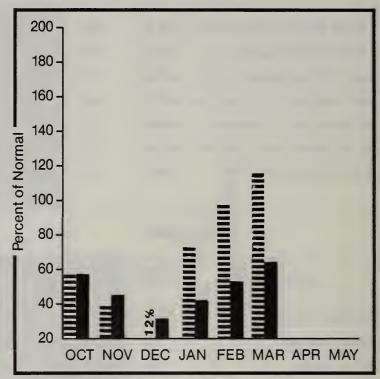




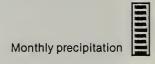




Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow water accumulations on April 1 were still below average. Snowpack in the Upper Humboldt Basin is 75% of average and 79% of last year's snow water content. The Lower Humboldt Basin is 92% of average and 72% of the snowpack present last year. Monthly precipitation for March was 115% of average and 137% of last year's monthy totals. Year to date precipitation is 64% of normal and 65% of last year's year to date totals. Water stored at Rye Patch Reservoir is well above average. Storage is 33% above the average. On April 1, 102 cfs was being released from the reservoir. Streamflows for the Humboldt Basın remain well below average. Humboldt River at Palisade is expected to flow at 140.000 acre feet or 52% of normal.

HUMEOLDT BASIN

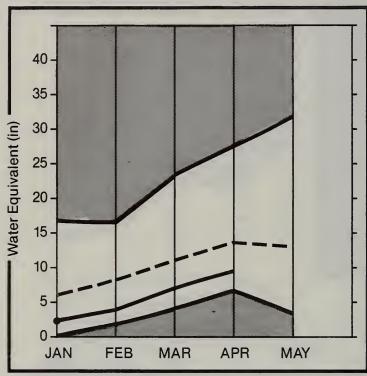
FORECAST POINT	FORECAST PERIOD	AVG.		MOST PROBABLE (% AUG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AUG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AUG.)	
HUMBOLDT RIVER at Palisade	APR-JUL	269.0	140.0	52	315.0	117	60.0	22	
HUMBOLDT RIVER at Comus	APR-JUL	229.1	98.0	43	306.0	134	45.0	20	
S FORK HUMBOLDT RIVER at Dixie	APR-JUL	71.5	45.0	63	86.0	120	12.0	17	
NF HUMBOLDT RIVER at Devils Gate	APR-JUL	34.3	22.0	64	42.0	122	5.0	15	
MARY'S RIVER or Deeth	APR-JUL	24.4	15.3	63	25.0	102	6.0	25	
MARTIN CREEK or Paradise Nv	AFR-JUL	19.0	13.0	68	18.0	95	8.0	42	
LAMOILLE CREEK rir Lamoille	APR-JUL	29.5	21.0	71	31.0	105	11.0	37	
REESE RIVER or Ione Nv	APR-JUL	7.8	6.0	77	10.0	128	2.0	26	
L. HUMBOLDT RIVER or Paradise Valley	APR-JUL	12.5	8.2	66	12.0	96	5.0	40	
ROCK CREEK or Battle Mtn.	APR-JUL	22.0	13.4	61	26.0	118	5.0	23	
RESERVOIR	STORAGE	(1000AF)	 		WATERSH	ED SNOWPAC	CK ANALYSIS	
RESERVOIR	USEABLE I		ELE STORAG	E **	WATERSHED		NO. COUR		YEAR AS % OF
RESERVOIN		YEAR	YEAR	AUG.	AH I EKSIIED				YR. AVERAGE
RYE PATCH RESERVOIR	194.3	162.6	178.9	122.5	LAMOILLE C	REEK	3	69	84
			,		S. FORK HL	MEOLDT	11	75	74
					MARY'S RIV	ER	5	71	76
					N. FORK HU	IMBOLDT	9	65	58
					HUMBOLDT R	tv. at Pali	sades 12	70	74
					HUMBOLDT R	IVER at Co	mus 12	70	74
					REESE RIVE	IR .	1	72	118

^{1 -} Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

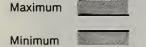
^{2 -} Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

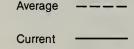
SNAKE & OWYHEE BASINS

Mountain snowpack* (inches)

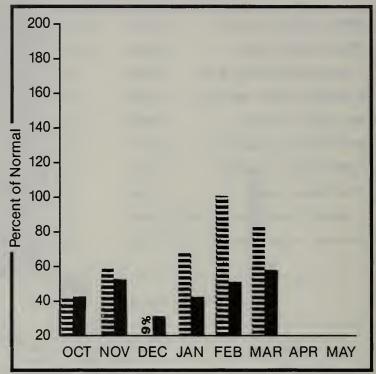


*Based on selected stations

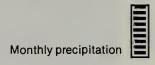




Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow water content is well below average. in the Snake is 76% of average and 75% of the amount of water in the snowpack last year at this time. The Owyhee snow water content is 59% of normal and 65% of Precipitation during March was 82% of last year. average and 99% of last March's precipicitation amounts. Year to date precipitation was 57% of normal and 49% of the total precipitation recorded last year at this time. Reservoir storage at Wildhorse is well above average. Usable storage is Streamflows are expected to 49% above the average. stay well below average. The Owyhee River near Owyhee is forecast at 42% of average.

SNAKE & OWYHEE BASINS

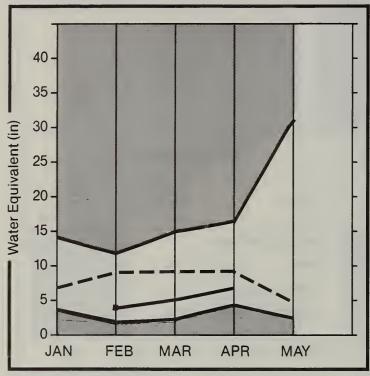
FORECAST POINT	FORECAST PERIOD	AVG.	PROBABLE	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.	>	
ONYMEE RIVER or Gold Creek	APR-JUL	30.4	11.0	36	23.0	76	5.0	16		
OWYHEE RIVER or Owyhee	APR-JUL	86.0	36,0	42	71.0	83	17.0	20		
S FORK OWYHEE or White Rock, Nv	APR-JUL	83.0	46.0	55	80.0	96	15.0	18		
SALMON FALLS CK or San Jacinto	MAR-JUL	97.0	48.0	49	87.0	90	19.0	20		
RESERVO	IR STORAGE		(1000AF)	1		WATERSH	ED SNOWPAC	K ANALYS	IS	
	USEABLE 1	** USE	ABLE STORAG	E ** 1				TH	IS YEAF	AS % OF
RESERVOIR	USEABLE 1 CAPACITYI	THIS	ABLE STORAG LAST YEAR	1	WATERSHED		NO. COUR AVG'	SES		AS % OF
RESERVOIR	CAPACITYI	THIS YEAR	LAST YEAR	AVG.	WATERSHED OWYHEE RIV	ER or Owyh	COUR AVG'	SES D LA		
	CAPACITYI I	THIS YEAR	LAST YEAR	AVG.		,	COUR AVG' ee 7	SES D LA	ST YR.	AVERAGI
	CAPACITYI I	THIS YEAR	LAST YEAR	AVG.	OWYHEE RIV	nr Gold C	COUR AVG' ee 7 reek 4.	SES D LA	ST YR.	AVERAG
	CAPACITYI I	THIS YEAR	LAST YEAR	29.4	OWYHEE RIV	nr Gold C	COUR AVG' 	SES D LA	ST YR. 5 3	AVERAGE 68 63

^{1 -} Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

^{2 -} Corrected for upstream diversions or changes in reservoir storage.
The average is computed for the 1961-85 base period.

EASTERN NEVADA

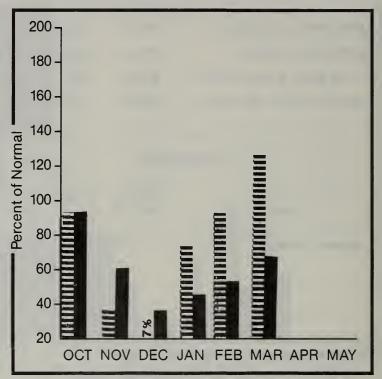
Mountain snowpack* (inches)



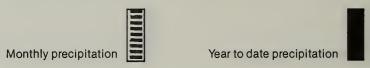
*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations



WATER BUFFLY OUTLOOK:

Snowpack accumulations are below average. Water present in the snowpack is 74% of average and 62% of last year's snow water content. Last month's precipitation was 126% of normal and 58% of last March's precipitation. Year to date precipitation is 67% of average and 101% of totals recorded at this time last year. Streamflow forecasts are expected to be below average. Steptoe Creek near Ely is forecast at 1500 acre feet or 46% of average. The Franklin River near Arthur is projected to flow 5800 acre feet or 85% of average.

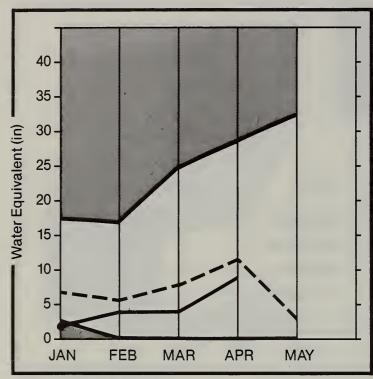
EASTERN NEVADA

FORECAST POINT	FORECAST PERIOD	AVG.			REAS. MAX. (1000AF)				
STEPTOE CREEK or Ely	APR-JUL	3.2	1.5	46	3.0	93	1.0	31	
KINGSTON CREEK or Austin, Nv	APR-JUL	4.2	4.5	107	7.0	166	2.0	47	
FRANKLIN RIVER or Arthur	APR-JUL	6.9	5,8	85	10.0	146	2.0	29	
RESERVO	DIR STORAGE	(1000AF)			WATERSH	IED SNOWPACK	<pre>< ANALYSIS</pre>	
DECEMBATE		** USEA		_	UATERCHER		NO.		YEAR AS % OI
RESERVOIR		THIS	LAST	_	WATERSHED		NO. COURS AVG'D	SES	YEAR AS % OF
RESERVOIR		THIS	LAST	 AUG. 	WATERSHED FRANKLIN R	IVER	COURS AVG 'D	SES LAST	
RESERVOIR		THIS	LAST	 AUG. 			COURS AVG 'D	SES LAST	YR. AVERAGI
RESERVOIR		THIS	LAST	 AUG. 	FRANKLIN R	REEK	COURS AVG'C	SES D LAST 48	YR. AVERAG 49 118

¹ - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below. 2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

NORTHERN GREAT BASIN

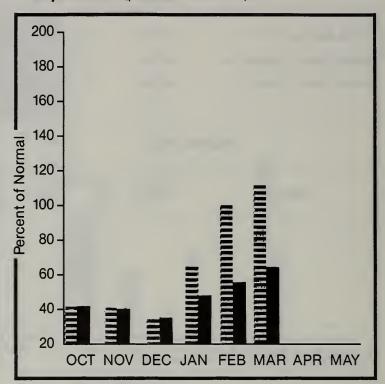
Mountain snowpack* (inches)



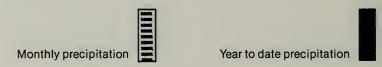
*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations



WATER SUPPLY OUTLOOK;

Snow water content is well below to near average in the basin. The western portion of the basin is reporting 90% of the average snowpack while the eastern portion is showing 59% of average. western portion of the basin is 74% of last year and the eastern portion is 265% of last year's snowpack. Precipitation recorded in March ranges from 120% of average in the east to 99% in the west. Inis year's March precipitation is 80% of last year's in the east and 86% of last year's in the west. Year to date precipitation is 66% of average in the west and 63% Total precipitation since of average in the east. October is 53% of last year in the east and 56% of Bidwell Creek near Fort last year in the west. Bidwell is forecast at 7000 ac. ft. or 58% of normal.

NORTHERN GREAT BASIN

FORECAST FOINT		25 YR. AVG. (1000AF)	PROBABLE	PROBABLE		REAS. MAX. (% AVG.)		REAS. MIN. (% AVG.)	
BIDHELL CREEK or Fort Bidwell	APR-JUL	12.0	7.0	58	12.0	100	2.0	17	
DEEP CREEK or Cedarville, Ca	AF:R-JUL	3.6	1.9	53	3.0	83	1.0	28	
EAGLE CREEK or Eagleville, Ca	APR-JUL	4.3	3.1	72	5.0	116	1.0	23	
MILL CREEK or Cedarville, Ca	AFR-JUL	4.1	2.7	66	4.0	98	1.0	24	
QUINN RIVER or McDermitt, Nv	AF:R-JUL	16.0	9.0	56	13.0	81	5.0	31	
E. FORK QUINN RIVER or McDermitt	APR-JUL	10.4	5.9	57	9.0	87	3.0	29	
MCDERMITT CREEK or McDermitt	APR-JUL	14.4	5.7	46	10.0	69	2.0	14	
RESERVOI	R STORAGE	(1000AF)	1		WATERSH	HED SNOWPACK	(ANALYSIS	
RESERVOIR	USEABLE CAPACITY	** USEA	BLE STORAG	E xx 1	HATERSHED		NO'. COURS		YEAR AS % OF
NESENVUIN		YEAR	YEAR	AVG.			AVG'[LAST	YR. AVERAGE
				1	BIDMETT		5	19.77	90
				i	MILL CREEK	(2	66	85
					DEEP CREEK	<	2	66	85
					EAGLE CREE	EK	2	66	85
					QUINN RIVE	ER	1	290	24
					E. FORK QU	INN	1	290	24
					McDERMITT	CREEK	1	290	24
								1931	

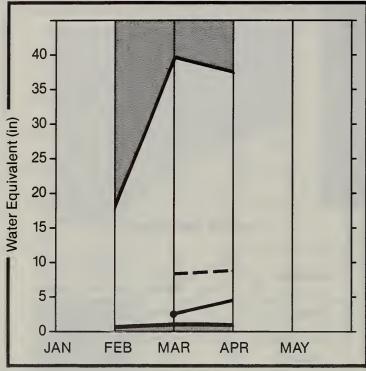
^{1 -} Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

^{2 -} Corrected for upstream diversions or changes in reservoir storage.

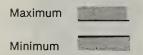
The average is computed for the 1961-85 base period.

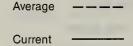
SOUTHERN NEVADA

Mountain snowpack* (inches)

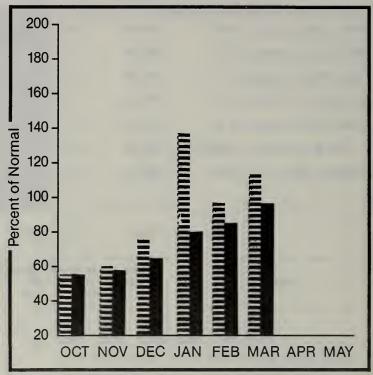


*Based on selected stations

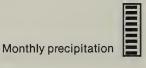




Precipitation* (percent of normal)



*Based on selected stations



Year to date precipitation

WATER SUPPLY OUTLOOK:

Snow water content in the snowpack supplying the Virgin River is about 91% of average. Snowpack accumulation for the Lower Colorado River is 53% of normal and 67% of last year's snow water content. Monthly precipitation for March was 113% of average and 189% of last year's March totals. Total precipitation since October 1 is 96% of average and 111% of totals reported last year at this time. Storage at Lake Mohave is near normal at 105% of average. Lake Mead has 24,181,000 acre-feet of useable storage. The Virgin River near Hurricane, UT is forecast at 52,000 acre-feet which is 76% of average.

SOUTHERN NEVADA

FORECAST FOINT	FORECAST PERIOD	AVG.	MOST PROBABLE (1000AF)		REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)		REAS. MIN. (% AVG.)	
VIRGIN RIVER near Hurricane, UT	AFR-JUL	68.0	52.0	76	<i>7</i> 5.0	110	30.0	44	
LAKE POMELL inflow	APR-JUL	8086.0	7500.0	93	9760.0	121	5480.0	68	
RESERVOIR			(1000AF)			WATERS		K ANALYSIS	VEAR AC V OF
RESERVOIR	USEABLE I CAPACITY!	THIS	ABLE STORAG LAST YEAR		WATERSHED		NO. COUR AVG'	SES	YEAR AS % OF YR. AVERAGE
LAKE MOHAVE	1810.0	1764.5	1665.2 1	677.0	VIRGIN RV.	at Little	efield 4	119	91
LAKE MEAD	26159.0	24181.0	23273.0 1	947.3	VIRGIN RV.	at Hurric	cane, 4	119	91

^{1 -} Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

^{2 -} Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT		AVERAGE 1961-85
LAKE TAHOE						
ECHO PEAK (CA) ECHO SUMMIT (CA) FALLEN LEAF (CA) FREEL BENCH (CA) HAGANS MEADOW (CA) HEAVENLY VALLEY (CA) LAKE LUCILLE (CA) MARLETTE LAKE RICHARDSONS #2 (CA) RUBICON #1 (CA) RUBICON #2 (CA) TAHOE CITY CROSS(CA) WARD CREEK #3 (CA)	8200 8000 6500 8100 7500	3/31/87 3/30/87 3/26/87 3/30/87 3/30/87 3/26/87 4/01/87 3/31/87 4/01/87 4/01/87 3/31/87 3/30/87 3/31/87	56 51 6 9 28 58 101 40 28 86 44 22 56 54	22.9 18.3 1.8 2.4 10.9 16.9 38.2 14.2 9.6 30.4 18.4 9.1 22.0 22.3	.0 9.4 23.7 44.6 93.6 38.1 16.2 78.3 41.7 16.7	18.1 28.4 61.1 23.2 16.1 51.7 30.8 19.9 41.5
TRUCKEE RIVER	0100	U/ U1/ U1	О Т	function 18 °cm²	"Time a 'm'	tud of a tud
BIG MEADOWS BROCKWAY SUMMIT (CA CASTLE CREEK (CA) DONNER SUMMIT (CA) FORDYCE LAKE (CA) FURNACE FLAT (CA) INDEPENDENCE CAMP C INDEPENDENCE CREEK INDEPENDENCE LAKE C LITTLE VALLEY MT. ROSE MT. ROSE SKI AREA SQUAW VALLEY #2 (CA) SQUAW VALLEY G.C., C TAHOE CITY CROSS(CA TRUCKEE #2 (CA) WEBBER LAKE (CA)	7400 6900 6500 6700 A 7000 6500 6300 9000 9000 9000	3/31/87 3/25/87 3/30/87 3/27/87 3/26/87 3/25/87 3/31/87 3/31/87 3/31/87 3/31/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87	38 30 79 64 62 76 28 15 61 8 44 61 70 77 22 21 58 76	13.0 10.0 31.9 25.7 26.4 29.9 10.6 5.2 21.2 2.5 15.2 21.9 25.3 29.8 9.1 6.6 20.8 26.4	40.2 21.5 69.0 46.4 44.1 58.5 27.3 13.0 61.5 47.7 67.9 72.1 74.0 16.7 11.3 43.6 58.7	17.2 53.1 39.2 42.1 49.6 23.0

SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH			AVERAGE 1961-85
		1000 1000 1000 1000 1000 1000 10			** **** **** **** **** **** **** ****	
CARSON RIVER						
BLUE LAKES (CA) CARSON PASS, UP (CA EBBETTS PASS #2 (CA MONITOR PASS AM(CA POISON FLAT #2 (CA) SPRATT CREEK (CA) WET MEADOWS #2 (CA)	() 8700 () 8350 7900 6080	3/24/87 3/25/87 3/30/87 3/30/87 3/30/87 3/30/87	61 54 32 29 0	8.8 21.5 18.8 10.6 10.5 .0	48.2 59.7 62.5 24.0 26.0 .0	37.2 36.2 40.2 18.7 3.3 41.6
WALKER RIVER						
LEAVITT LAKE (CA) LEAVITT MEADOWS (CA) LOBDELL LAKE (CA) SAWMILL RIDGE (CA) SONORA PASS (CA) TIOGA PASS (CA) VIRGINIA LAKES (CA) WILLOW FLAT (CA)	9200 8750 8800 9900 9500	3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87 3/30/87	2 34 28 38 45 25 34	23.9 .4 9.0 9.0 13.6 13.2 8.6 9.8 4.4	75.8 10.6 30.5 34.0 42.2 32.4 32.5 19.4	49.1 8.5 18.0 20.1 26.3 29.0 18.3 19.8 11.3
NORTHERN GREAT BASIN						
BARBER CREEK (CA) CEDAR PASS (CA) DISMAL SWAMP #2 (CA) MT. BIDWELL (CA) RESERVATION CR. (CA) BALD MOUNTAIN DISASTER PEAK FORTY-NINE MOUNTAIN HAYS CANYON LITTLE BALLY MTN. A	7200 () 5900 (M 6720 6500 () 6000 () 6400	3/25/87 3/27/87 3/31/87 3/30/87 3/26/87 3/31/87 4/01/87 3/25/87 3/24/87 3/31/87	43 67 54 26 8 9 0	8.3 15.1 26.8 20.9 10.5 .1T 2.9 2.4 .0 .1T 4.3	12.3 22.8 33.4 29.9 12.4 1.0 1.0	16.8 27.0 24.7 10.9 3.3 12.0
SNAKE RIVER						
BEAR CREEK FOX CREEK GOAT CREEK HUMMINGBIRD SPRINGS POLE CREEK R.S. SEVENTYSIX CREEK	4800 8800 8950 8330	3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/30/87	25 47 60 53	17.2 8.3 14.3 18.6 17.4 8.7	6.9 19.6 28.5 21.6	10.5 19.2 24.7 22.0

SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	ELEVATION	DATE		WATER CONTENT		AVERAGE 1961-85
OWYHEE RIVER						
BIG BEND FAWN CREEK #2 GOLD CREEK JACK CREEK, LOWER JACK CREEK, UPPER JACK CREEK #2,UPPER JACKS PEAK LAUREL DRAW TAYLOR CANYON	7250 7280 8420 6700	3/30/87	36 3 4 26	13.8 17.1 6.8	21.4 1.8 .0 9.3 19.1 32.7	18.5 26.8 8.4
HUMBOLDT RIVER, UPPER						
CORRAL CANYON DORSEY BASIN DRAW CREEK #2 DRY CREEK FRY CANYON GREEN MOUNTAIN HARRISON PASS #1 HARRISON PASS #2 LAMOILLE #1 LAMOILLE #3 LAMOILLE #5 POLE CANYON #2 RODEO FLAT RYAN RANCH SMITH CREEK TREMEWAN RANCH TROUT CREEK, LOWER	8500 8100 7450 6500 6700 8000 6600 7400 7100 7700 8700 7700 6800 5800 7700 6900	3/31/87 3/31/87 3/30/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87 3/31/87	31 25 0 11 32 5 13 25 37 61 23 16 0 30	13.4 10.2 8.5 .0 3.8 11.0 1.7 3.1 8.8 12.0 22.4 7.8 5.5 .0 10.0 4.7	5.4 14.5 .0 .0 8.5 13.7 40.5 12.2 5.5	14.8 2.8 6.9 14.0 3.1 5.3
HUMBOLDT RIVER, LOWER						
BIG CREEK CAMPGROUN BIG CREEK MINE BIG CREEK, UPPER BUCKSKIN, LOWER BUCKSKIN, UPPER GOLCONDA #2 GRANITE PEAK LAMANCE CREEK	7600	3/30/87 3/30/87 3/30/87 3/30/87 4/01/87 4/01/87 4/01/87 4/01/87 4/01/87	24 49 30 18 23 8 41	3.8 6.8 14.2 8.8 6.7 8.6 2.6 15.9 3.8 8.0	19.6	1.1 5.1 12.0 7.8 9.0 11.2 4.0 17.6 8.9 9.4

SNOW DATA MEASUREMENTS (CONT)

SNOW COURSE	El	EVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
ÉASTERN NEVADA							
BAKER CREEK #1 BAKER CREEK #2 BAKER CREEK #3 BERRY CREEK BIRD CREEK HOLE-IN-MOUNTAIN KALAMAZOO CREEK MURRAY SUMMIT ROBINSON SUMMIT SILVER CREEK #2 WARD MOUNTAIN #2	AM AM	7950 8950 9250 9100 7500 7900 7400 7250 7600 8000 9200	3/30/87 3/30/87 42/87/87 3/24/87 3/24/87 3/29/87 3/29/87 3/24/87 42/87/87	26 53 63 57 6 29 26 0 0 13	6.0 13.5 15.1 13.6 1.1 9.4 7.5 .0 .0	5.2 20.4 25.8 20.7 .0 28.6 9.8 .0 .0	6.8 14.9 17.3 14.2 2.1 22.1 8.2 2.3 1.0 5.2
LOWER COLORADO RIVER							
CORDUROY FLAT KYLE CANYON LEE CANYON #2 LEE CANYON #3 RAINBOW CANYON #2 WHITE RIVER #1		8720 8200 9000 8500 8100 7400	4/02/87 3/30/87 3/30/87 4/03/87 3/30/87 42/87/87	5 18 27 15 27 0	1.3 5.8 7.2 4.5 6.85	.0 5.8 7.1 6.1 17.1	9.9 9.7 8.5 15.8 2.2

SNOW CORE MEASUREMENTS - DRI-ASC

ELEVATION FEET	LOCATION	SNOW IN.	WATER IN.
5800	Clear Creek	0	0
7260	Spooner Summit	18.0	8.0
5250	Cliff Ranch, Franktown	0	0
6540	Little Valley	4.0	1.4
5160	Davis Creek	0	0
4590	Jct. 395 & NV 27	0	0
5110	Lancer	0	0
5670	Whites Creek	0	0
5700	Evergreen Hills Rd.	0	0
6000	Jones Creek	0	0
6400	RNR Forestry Site	0	0
7060	Reindeer Lodge	0	0
7440	Galena Creek	30.0	10.6
7620	Sky Tavern	21.0	8.0
8280	Mt. Rose Resort	45.0	17.7
8820	Tamarack Lake	46.0	16.2
8540	Tahoe Meadows	61.0	
8000	Below Incline Lake	40.0	14.1
7300	Apollo Way	13.0	4.4
6235	Third & Incline Creeks	0	0
7200	Brockway Summit	31.0	11.0
6320	North Star Fire Dept.	0	0
5900	Truckee - Tahoe Airport	0	0
6540	Cabin Creek	10.0	3.8
6240	Squaw Valley Fire Dept.	6.0	2.1
6200	Thunder Cliff	0	0
6240	Tahoe City	0	0
6200	Bennett Flat	14.0	4.5
6960	Alder Creek	50.0	23.3
5850	Hobart Mills	0	0
6340	Sagehen Creek	21.0	8.8
6410	Henness Past Jct.	23.0	8.3
6200	Fuller Lake	0	0
6000	Joy Lake	0	0
9800	Relay Station Tram	73.0	(25.6)

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation

California Department of Water Resources Colorado River Commission of Nevada

Idaho Cooperative Snow Surveys

Nevada Association of Conservation Districts

Nevada Department of Conservation & Natural Resources

Division of Water Resources

Nevada State Forester

Division of Conservation Districts

Oregon Cooperative Snow Surveys

University of Nevada, Desert Research Institute

Utah Cooperative Snow Surveys

FEDERAL

Bureau of Reclamation

Forest Service Geological Survey

Soil Conservation Service

U.S. District Court - Federal Water Master

NOAA, National Weather Service

PRIVATE

Nevada Irrigation District

Owyhee Project North Board of Control Owyhee Project South Board of Control Pacific Gas and Electric Company

Pershing County Water Conservation District

Sierra Pacific Power Company Truckee - Carson Irrigation District Walker River Irrigation District

Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
1201 TERMINAL WAY, SECOND FLOOR
RENO, NEVADA 89502

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

THIRD CLASS BULK RATE POSTAGE AND FEES PAID USDA • SCS

PERMIT NO G-267

THIRD CLASS MAIL

Nevada Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys



SOIL CONSERVATION SERVICE

USDA, NAT*L AGRICULTURAL LIB SERIALS CONTROL, ROOM 002

BELTSVILLE, MD

20705